

# Cloud Computing

## **Training Module:**

### Chapter 1 - Introduction to Cloud Computing

- What is the cloud?
- History of Cloud Computing
- How Cloud Computing Works
- Cloud Service Providers
- Cloud Computing Terminology

### Chapter 2 – Virtualization

- Virtualization Basics
- Objectives
- Benefits of Virtualization
- Emulation
- Virtualization for Enterprise

### Chapter 3 - Building Cloud Networks

- Designing and Implementing a Data Center-Based Cloud
- Communication Requirements for Cloud Implementation

### Chapter 4 - Private Clouds

- What is it?
- Installing a Private Cloud

### Chapter 5 - Amazon Web Services

#### a. **Compute and Networking**

1. EC2
2. Elastic MapReduce
3. Route 53
4. VPC

#### b. **Storage and Content Delivery**

1. S3
2. Cloud Front
3. Storage Gateway

#### c. **Database**

1. DynamoDB
2. ElastiCache
3. RDS

#### d. **Deployment and Management**

- a. CloudFormation
- b. CloudWatch
- c. Elastic Beanstalk
- d. IAM

#### e. **App Services.**

- a. SES
- b. SNS
- c. SQS
- d. SWF

## Chapter 6 - Microsoft Azure

- Azure Introduction
- Azure Web Role
- Publishing to the Cloud
- Azure Administration
- Azure storage
- Azure worker role
- SQL Azure
- Windows Azure Diagnostic Services

## Chapter 7 - Google App Engine

- What is GAE
- App engine Capabilities
- Authentication via google
- GAE Account Setup
- SDK and Integration
- Entities and model
- CRUd Operation and GQL
- Web Services